## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 30 June 2005 (30.06.2005)

## (10) International Publication Number WO 2005/058970 A1

(51) International Patent Classification7: 11/02

C08B 11/06.

(21) International Application Number:

PCT/KR2003/002874

(22) International Filing Date:

29 December 2003 (29.12.2003)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data: 10-2003-0092005

16 December 2003 (16.12.2003)

- (71) Applicant (for all designated States except US): SAM-SUNG FINE CHEMICALS, CO., LTD. [KR/KR]: 190 Yeochon-dong, Nam-gu, 680-090 Ulsan (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KIM, Seok Soo [KR/KR]; 401-504 Expo Apt., Jeonmin-dong, Yuseong-gu, 305-762 Daejeon (KR). SO, Jung Ho [KR/KR]; 304-504 Expo Apt., Jeonmin-dong, Yuseong-gu, 305-761 Daejeon (KR). LEE, Sang Ku [KR/KR]; 211-1202 Expo Apt., Jeonmin-dong, Yuseong-gu, 305-761 Daejeon (KR). LEE, II Yong [KR/KR]; 109-406 Sejong Apt., Munji-dong, Yuseong-gu, 305-380 Daejeon (KR). CHO, Myung Seung [KR/KR]; 101-401 Sejong Apt., Jeonmin-dong,

Yuseong-gu, 305-728 Daejeon (KR). YUN, Kyoung In [KR/KR]; 513-103 Cheongsol Apt., Songkang-dong, Yuseong-gu, 305-752 Daejeon (KR).

- (74) Agent: PAIK, Nam-Hoon; 14thFl., KTB Network Bldg., 826-14, Yeoksam-dong, Kangnam-gu,, Seoul 135-769 (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG. KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR. TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PREPARATION OF FINE POWDERED CELLULOSE ETHERS

(57) Abstract: The present invention relates to a method for preparing fine powdered cellulose ethers. In particular, the present invention relates to a method for preparing cellulose ethers in a cost-effective manner having high running efficiency of process, which comprises specifically regulating a reaction condition of each step to induce a particle refinement and significantly reduce a running load on a grinding process, in the reaction of treating finely pulverized celluloses with a caustic soda and reacting with an etherifying agent.